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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,303	09/26/2003	Chia-Ming Chang	MR929-916	5352

4586 7590 12/29/2004

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EXAMINER

LONEY, DONALD J

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/670,303

Applicant(s)

CHANG, CHIA-MING

Examiner

Donald Loney

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by any of Holman (4255477), Lambuth (4413459) or Clarke et al (5525394).

Refer to figures 1, 2, 14 and 15 in Holman showing a three-layered laminate wherein the grain of the core layer (20a, 44) is perpendicular to the outer layers (18a, 20a, 40a, 42a). Refer to figures 1 and 4 in Lambuth showing core grain d_i that is perpendicular to the grain d_o of the face sheets. Refer to core 105, which has a grain perpendicular to the grain of the layers 101 and 107 in Clarke et al.

3. Claims 1-4, are rejected under 35 U.S.C. 102(b) as being anticipated by Weyerhaeuser (2354725).

Weyerhaeuser teaches a core 10,65 with slits therein 11,12,68 wherein the grain of the core runs perpendicular to the face sheets in the figures. See the grain of core 10, which runs from the front to the back of the sheet as can be seen from the right side of figure 1, while the grain of the face sheets runs from the right to the left of the sheet in figure 1. In figure 8, it is the opposite of figure 1, in that the core grain runs from side to side of the sheet while the face sheet grain runs from the front to the back of the sheet. Figure 8 also shows the tongue and groove of instant claim 2.

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4. Claims 1,3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Bryant (3234074).

Bryant teaches a composite board wherein the core grain 16,38 is perpendicular to the face sheet grains 22. Bryant also teaches an additional layer 26,44 which has a grain 28 perpendicular to the face sheet grain 22 for instant claim 5 (see figure 2). The outer layers are laminated plywood that has the grain running perpendicular in each layer. Refer to figure 5. Slits are show between strips 12,32 in the figures.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2,4 and 6-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bryant in view of Weyerhaeuser.

Bryant teaches the invention substantially as recited except for the tongue and groove connection means and arrangement of the slits in claims 6-8 and 10-12.

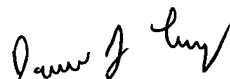
Weyerhaeuser teaches that the slits in a core composite board as claimed can be cross wise and other forms may be used in order to provide air channels in the panel for anti-warping purposes (page 2, column 1, lines 39-44). Refer to page 3, column 1, lines 46-48 and column 2, lines 51-54. Tongue and groove connections are show in figures 8 and 9 by elements 66,67,78,79.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to Bryant to include cross cut and angled slits in the core, as taught by Weyerhaeuser, motivated by the fact Weyerhaeuser teaches that other forms of the slits are within ordinary skill in the art and would provide the same type air channels in order to vent damaging moisture from the board.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Loney whose telephone number is (571) 272-1493. The examiner can normally be reached on Mon, Tues, Thurs and Fri. 8AM-4PM, flex schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Donald Loney
Primary Examiner
Art Unit 1772

DJL:D.Loney
12/27/04